



**Operating Permit Issued Pursuant to Tennessee Air Quality Act**

Date Issued: December 15, 2014

Permit Number:  
069544P

Date Expires: February 1, 2024

**Issued To:**

Tennessee Department of Safety and Homeland Security  
Kingston Springs Radio Site

**Installation Address:**

1029 Firetower Road  
Kingston Springs

**Installation Description:**

One Internal Combustion 79 hp Propane/Natural Gas Fired  
Spark-Ignited Engine for an Emergency Generator  
Cummins Model GM 5.0L  
Manufacture Year of Engine: 2014

**Emission Source Reference No.**

11-0096-01  
NSPS Subpart JJJJ  
NESHAP Subpart ZZZZ

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

**CONDITIONS:**

1. The application that was utilized in the preparation of this permit is dated November 3, 2014, and signed by Stephen Philyaw, Radio Systems Analyst for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

**(Conditions continued on next page)**

  
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

**NON-TRANSFERABLE**

**POST AT INSTALLATION ADDRESS**

2. The stated design power output capacity for this internal combustion engine (Cummins GM 5.0L) is 79 horsepower. Any increase in this capacity will require a construction permit.

TAPCR 1200-03-09-.01(1)(d) and the application dated July 31, 2014.

3. Operating time for maintenance checks and readiness testing shall not exceed 100 hours per calendar year. Non-emergency operating time excluding maintenance checks and readiness testing shall not exceed 50 hours per calendar year.

TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ

4. Only propane and natural gas shall be used as fuel for this source.

TAPCR 1200-03-09-.01(1)(d) and the application dated July 31, 2014.

5. Particulate Matter (TSP) emitted from this source shall not exceed 0.6 lb/MMBtu (0.4 pound per hour). Compliance with this emission limit shall be assured by compliance with **Conditions 2 and 4** of this permit.

TAPCR 1200-03-06-.02(2)

6. Carbon Monoxide (CO) emitted from this source shall not exceed 519 grams per kilowatt-hour (67.4 lb/hr).

TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ

7. Hydrocarbons and Nitrogen Oxides (HC + NO<sub>x</sub>) emitted from this source shall not exceed 13.4 grams per kilowatt-hour (1.74 lb/hr).

TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ

8. Compliance with the emission limits in **Conditions 6 and 7** is based on compliance with **Conditions 2, 4, and 12** of this permit.

9. The generator shall be equipped with a non-resettable hour meter prior to startup of the engine.

TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ

10. Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity except for one six-minute period per one (1) hour or more than twenty four (24) minutes in any twenty four (24) hours. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(1) and TAPCR 1200-03-05-.03(6)

**(Conditions continued on next page)**

11. The permittee shall keep a log of the number of operating hours for each calendar year, in a form that readily provides the information required in the following table and shows compliance with **Condition 3** of this permit. All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of each calendar quarter for which the data is required. The permittee shall retain this record at the source location for a period of not less than two (2) years and keep this record available for inspection by the Technical Secretary or their representative.

TAPCR 1200-03-10-.02 (2) (a)

Year:				
Operating Hours per Calendar Year				Comments**
Calendar quarter	Maintenance checks & readiness testing	Other non-emergency operation	Emergency operation	
Jan - Mar				
Apr - June				
July - Sept				
Oct - Dec				
<b>Totals</b>				
** The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.				

12. Pursuant to 40 CFR §60.4243, the permittee shall comply with either of the following requirements:
- (a) Operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions and keep records of conducted maintenance to demonstrate compliance; or
  - (b) Keep a maintenance plan and records of conducted maintenance to demonstrate compliance, and to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Performance testing is not required for an owner or operator of a stationary SI internal combustion engine less than 100 hp.

(Conditions continued on next page)

13. Under the Provisions of 40 CFR 63 Subpart ZZZZ-National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), this facility is considered to be "new" stationary RICE located at an "Area Source." This unit is considered to be new because its construction commenced on or after June 12, 2006. (§63.6590)

This rule states that "new" RICE units at area sources that started up after January 18, 2008, must comply with the applicable emission limitations and operating limitations upon startup.

§63.6590(c) states that a new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for stationary spark ignition internal combustion engines. No further requirements apply for such engines under Subpart ZZZZ.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ

14. This permit is valid only at this location.

TAPCR 1200-03-09-.03(6)

15. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards.

TAPCR 1200-03-09-.01(1)(d)

16. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application.

TAPCR 1200-03-09-.03(8)

17. The permittee shall apply for renewal of this permit not less than sixty (60) days prior to the permit expiration date, pursuant to Division Rule 1200-03-09-.02(3).

**(End of conditions)**

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